

AMERICAN VETERINARY REVIEW,

JUNE, 1884.

ORIGINAL ARTICLES.

CONTAGIOUS DISEASES OF ANIMALS IN THE UNITED STATES.

A Paper read at the Chicago Convention by Prof. J. LAW, F.R.C.V.S., of
Cornell University.

(Continued from page 72.)

Measures for Suppression and Extinction.

In devising means for suppressing any plague we must give paramount attention to two great considerations: *First*, can we render the animal system *insusceptible* or *non-receptive* of the *poison*; and *Second*, can we *destroy every vestige of the poison*? No plague can be propagated in the absence of susceptible subjects. The lung plague virus is perfectly harmless to a community of horses, sheep or pigs. So it is to a great extent to cattle that have already been infected by it and have fully recovered from the disease. Just as a man does not readily contract small-pox a second time, so an ox does not usually suffer a second time from lung plague. I would not trouble you with this part of the subject, but that some advocate the restriction of this plague by producing this comparative insusceptibility in the animals exposed.

Methods of Seeking Insusceptibility.

This insusceptibility to lung plague may be secured more or less perfectly, by :

1st—*Keeping Insusceptible Breeds.*—Some breeds appear to be somewhat less susceptible to lung plague than others. In some this has been acquired by a long exposure of their ancestors to the plague, so that the more susceptible strains of blood have died out, leaving only those that have a greater power of resistance to this contagion. This is merely “the survival of the fittest.” In other cases cattle that are defective in muscular development, in loose connective tissue and in the lymphatic apparatus show a somewhat diminished susceptibility as compared with those of an opposite habit of body. But in neither of these cases is the susceptibility ever completely eradicated from the race or family. Each of these conditions will to a very slight extent reduce the losses, but neither separately nor together can they arrest the propagation of the poison, nor prevent the progress of the disease. They are, therefore, only to be sought on the unfenced pasture ranges, covered with cattle, where the permanence of the disease is already assured, and where no hope of its extinction can be held out. In other circumstances we can do incomparably better.

2d—*Passing the young through the disease.*—In badly infected districts shrewd dairymen have profitably resorted to the exposure of calves to the infection, realizing that the pecuniary loss through the death of the individual animal at this age was small, while the survivors could afterwards be exposed to infection with impunity.

3d—*Inoculation with the fresh virus from the diseased lung.*—A more economical method is the inoculation of the susceptible cattle in the tail, so as to exhaust the susceptibility. This, when properly managed, does not cause a loss of more than one or two per cent., and the survivors acquire as perfect an immunity as vaccinated people have from small-pox. This inoculation is extensively practiced in Belgium and France, is obligatory in Holland, and is almost universal in Australia, New Zealand, Tasmania, South Africa and in certain parts of Great Britain and America. It has greatly diminished the losses in these countries, but in no one of them has it put an end to the plague. In the city of Edinburgh, where it is supplemented by the

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slaughter of the sick, and where it was loudly claimed that it had extinguished the plague, I found in my recent visit that the abattoir was presenting frequent examples of lungs from city dairy cows with the characteristic lesions of lung plague. In Holland, where the compulsory inoculation is also supplemented by slaughter, the fat cattle from the great feeding stables frequently furnish, when killed, the unmistakable lesions of the same disease. Nor is this at all surprising. The inoculated poison propagated in the tissues of the tail protects the individual system, but also secures the multiplication of the germs and their preservation in the stables, so that when an animal freshly introduced and inoculated fails to take, and to be protected, it has every opportunity of contracting the disease, in the ordinary way, in the lungs. The same results obtain where inoculation is practised on a large scale upon cattle exposed in open pasturages. Mr. Watson states as his experience in Australia and New Zealand that on the occasions when large herds of thousands and tens of thousands had been inoculated, a certain number of animals always failed to be brought in, and among these uninoculated animals there was in every case a very heavy percentage of loss after they had mingled with the inoculated. Mr. Corbet gives the same testimony concerning his experience in Natal. "The disease," he says, "is always lurking about, and introduced to a greater or less extent each time of inoculation." This is the greatest objection to inoculation as usually practiced. It is a means of multiplying the disease germs, and while it protects the inoculated animal it furnishes material for the infection of every susceptible animal that may be brought into contact with it, or with the premises where it has been. Inoculation is admissible as a means of self-protection by the individual owner, in cases where the Government or local authorities take no efficient steps for the stamping out of the disease, but it is bad policy when our object is the complete extinction of the malady, and when we are adopting other measures well calculated to secure this end. One thought more on this subject. From herds in which inoculation is permitted, no animal should be allowed to pass our condemnation except to immediate slaughter.

The premises become infected, and the animals may carry the infection on the surfaces of their bodies as well as in the lungs.

4th—*Inoculation with Weakened Virus.*—The application of the method of Pasteur, of inoculation with attenuated virus, is advocated by some, but it is liable to all the objections urged against the simple inoculation. The attenuated virus is weakened, not sterilized; the germs continue to propagate the kind, and as their virulence has been lessened by culture under certain conditions, it follows that it may be again increased under conditions of an opposite kind. All measures which owe their efficacy to the propagation of the disease-germ which we seek to destroy, are to be deprecated, where more judicious measures of extinction can be adopted.

5th—*Inoculation with Sterilized Virus.*—Two years ago I was led by my study of the manifestations of lung plague in the system to suspect that the immunity after a first attack of lung plague was acquired, not by contact of the living germ with the lung tissue, but by its chemical products or excretions. I accordingly took measures to kill the germ without altering the chemical conditions of the virulent fluid, and inoculated the sterilized liquid on the susceptible animal. In the animals into which this liquid was injected there occurred no local swelling such as results from the inoculation with the living germs, and no one of these animals had local swellings when afterward inoculated with fresh virus containing living germs, nor had any lung plague, when exposed for six months in infected herds and premises. On every occasion, when isolated, the animals thus protected by inoculation with fresh virus, I took the precaution of inoculating at the same time an unprotected subject, and in every such animal the disease appeared in a characteristic form and, when the inoculation had been made in the soft loose tissues of the flank, in a fatal one. I have since learned by experiments on animals that had stood some time in infected buildings, that this inoculation with sterilized lymph is not protective of animals that have already taken the germs into their lungs. To be effective it must be practiced on cattle before they have been exposed to contagion, and its efficiency will be enhanced by a repetition after an interval of a week or longer.

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This method, it will be observed, obviates the main objections to the ordinary inoculation. By it there is no germ introduced into the animal system, nor any laid up in the buildings where the inoculated beasts are kept. The method therefore may safely be applied to one of a score or a hundred susceptible cattle without endangering the rest, and the building where a thousand cattle have been operated on in this way may be at once filled with as many more fresh and susceptible animals without disinfection, yet without any danger of evil consequences.

The method is therefore incomparably superior to any other that has been hitherto employed, and in special cases may be resorted to with excellent results. The objections to its exclusive use are those that apply to all measures that come short of a speedy extinction of the disease: 1st. The keeping of diseased animals for the production of the virus is not without its dangers. 2d. The application of the method over a wide district is necessarily slow. 3d. Its application to districts extending over six different States would entail a vast amount of machinery, and the perfection of the work would suffer in various ways; operators would fail for lack of care or ability: cattle would escape notice and afterward fall victims to disease, and the incessant additions of susceptible animals by birth and otherwise would present a serious difficulty. 4th. To operate on animals most satisfactorily it must be done before they have entered the infected herd, and this would necessitate places of detention for such store animals outside the infected districts and a considerable additional delay and outlay in the traffic. 5th. The expense for all this machinery would be largely prohibitory of the practice. 6th. Finally, we cannot expect of this, any more than of any other inoculation, that it will prove absolutely protective in every case. We meet with second attacks of small-pox, measles and even of lung plague. We cannot therefore hope that we can altogether protect such exceptional animals as have a great inherent susceptibility to the lung plague. These exceptional cases forbid that we should adopt this as an exclusive method when we can resort to one which is absolutely certain in its results. This method may be of the greatest value for the protection of individual herds where

there is no governmental measure for stamping out, and it may be conjoined with the ordinary methods of extinction by slaughter without the danger of propagating the disease which always attaches to ordinary inoculation. But with all the many advantages which I see in this my own system, I am convinced that the Government can do incomparably better if it will.

6th. *Preventive Medication*.—In my experience of this disease in Scotland, over 20 years ago, I found that a long course of certain tonics, and notably of the preparations of iron, fortified the system so that few animals fell victims to the contagion. But in this, as in the two methods named, the result is imperfect and the subjects soon reacquire the susceptibility after the tonic has been withdrawn.

Destruction of the Poison.

1st. *By disinfection of the air breathed*.—In many instances of infected herds I have found that a thorough fumigation with sulphur fumes for half an hour at a time, twice or, better, three times a day, has at once put a stop to the further extension of the infection. The cattle already infected would still suffer; but for the others the poison was destroyed soon after it entered the air-passages and before it could make its way into the tissues, and no disease resulted. Like the other methods named, this has its drawbacks. It requires suitable buildings and careful manipulation to secure a sufficient effect without danger to the animals, and as such frequent application is requisite it must be left in the hands of attendants, who cannot always be relied on to carry it out safely and effectively.

2d. *By Isolation, Slaughter and Disinfection*.—Wherever the movement and intermingling of cattle can be prevented or sufficiently controlled, the method of suppression by isolation, slaughter and disinfection has ever been attended with the most perfect success. It has been insufficient in countries like Australia, where endless herds of cattle roam over the fenceless plains; but wherever lands could be enclosed and movement could be arrested or controlled, as in Norway, Sweden, Denmark, Holstein, Oldenburg, Switzerland and Massachusetts, it

has resulted in the destruction of four of the herds, with the court of Queens, work, the full of particular market supply except by markets, or healthy claimed carcasses be moved, ate slaughter, veterinary after the have been that all in be promptly be made ducts had

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has resulted in the complete eradication of the malady. In New York, in 1879, the same measures rooted out the disease from four of the eight infected counties, and restricted it to eight herds, which were preserved for lack of funds in two more of the counties, while in Kings County and the adjacent parts of Queens, where local authorities had successfully opposed our work, the malady remained widely prevalent. While advocating the full efficacy of this method, it is unnecessary to go into minor particulars further than to say that no additions from the public market should be allowed to herds in infected districts, nor except by natural increase or by special permit, from healthy districts, or through close markets which receive stock from such healthy districts only; that every death in a herd in such proclaimed infected districts should be promptly reported, and the carcass examined by a veterinary inspector; that no cattle should be moved from such herds in infected districts except to immediate slaughter, where examination of the carcass can be made by a veterinary inspector; or such movement should only be allowed after the herd and district have been certified by the inspector to have been sound and without dangerous additions for six months; that all infected animals, or far better, every infected herd should be promptly slaughtered; and that a thorough disinfection should be made of all premises when diseased animals or their fresh products had been.

I have always held that the only sound and just method of dealing with this disease must be directed and sustained by the National Government. I quote from my monograph on the lung plague, published in 1879.

"The plague threatens to reach our southern and western ranges, whence it will be as impossible to eradicate it as from the Russian steppes, Australia and South Africa, and from which continuous accessions of infection will be thrown upon our Middle and Eastern States, and shall we hesitate to call upon the National Government to interfere? This is a question of incomparably more moment to the western and middle States than to Delaware, Maryland or Virginia. To throw the burden of the extinction of this disease on these States is as impolitic as it is

unjust. If ever there was a question which in its future bearing affected the United States as a whole it is this.

"It would be highly appropriate that the agriculturists of the different States, Western and Southern, as well as Eastern, should petition Congress to take this matter up and adopt such measures as would forever rid our country of this most insidious of all animal plagues. At all hazards the work ought to be done and that speedily. If State rights stand in the way, let the money at least be supplied, as it rightfully ought, from the National exchequer, and applied by the different States through their own officials under the supervision of some responsible department—say the Agricultural Bureau, a Live Stock Disease Commission, the National Board of Health, or even the Treasury Department. It is folly and worse to quarrel about the means until the plague shall have passed beyond control. Action is wanted, of a prompt and decisive nature, by the General Government or with its assistance, and those who are most deeply interested in the subject should press this upon the Government until such action shall have been secured."

THE PLAGUE IN KANSAS.

REPORT OF THE VETERINARIAN OF THE UNITED STATES AGRICULTURAL DEPARTMENT.

(From the Northwestern Live Stock Journal.)

Prof. Salmon, the veterinarian of the Department of Agriculture, has submitted his official report in regard to the disease from which cattle have recently suffered in various parts of the West. He says that the cattle disease in Kansas, which has attracted so much attention from its supposed identity with the contagious foot and mouth disease of Europe, was first noticed last December in a herd located four miles northwest of Neosho. On March 13th there were 118 head of cattle on the farm where the disease had appeared, and 74 were more or less affected—nine animals had one foot off, four had two feet off, three others were affected in but one, six in two feet and one in three feet. This disease spread to adjoining farms very rapidly.

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Prof. Salmon submits elaborate details of all the facts connected with the various phases of the disease in various parts of Kansas, and in the vicinity of Kirksville, Adair County, Mo. He then says :

CONDITION OF THE CATTLE.

"All the diseased animals on the farms visited by me were stock cattle in medium to thin condition. On each of the farms there were animals of all ages. The calves and yearlings seemed to escape in a greater degree than the older cattle. The winter has undoubtedly been a severe one upon the stock of the western States, and the cattle were consequently somewhat below the average condition at this season of the year. The appearance of the disease cannot be explained by this fact, however, since thousands of healthy herds were in worse condition than those on the farms in question. Some of these herds were in better than an average condition. They had evidently been well fed and cared for. There was nothing in the surroundings of the affected animals which would explain the development of the disease. The feeding lots in most cases were unusually dry, and the disease had appeared at a time when all mud was frozen solid. The soil did not contain enough alkali even at Neosho Falls to make it at all probable that this could have been the exciting cause of the disease. As is usual in the management of cattle in the West, the herds are without shelter. As the animals first became lame it was supposed that mud had collected between the toes, and becoming hard was producing irritation. The animals were caught and their feet cleaned, but this had no effect upon the development of the disease.

"The foot and mouth disease of Europe is a specific fever, which only arises by contagion from other diseased animals. In the whole history of America there have been no spontaneous outbreaks of this disease, and in Europe the conviction is growing stronger every year that it has no other cause than contagion. We may accept it as a fact that the foot and mouth disease cannot occur in the United States except from the introduction of virus from abroad. When a disease having some resemblance in

its symptoms to foot and mouth disease is found in the interior of our country, more than a thousand miles from the ports where the contagion must necessarily be introduced, it becomes a matter worthy of the most careful consideration to determine whether there was any means by which this contagion could have been transported to the affected herd. In the present instance the animals of the affected herds have been purchased or raised in the neighborhood. No foreign animals or people have been upon the farm. When the first attack occurred, foreign cattle had for a long time been quarantined at the seaboard to make it impossible that this disease could have been carried in this way to the west.

WHERE DID IT COME FROM?

"It is almost impossible to find any means by which a foreign contagion could have been introduced. This important indication seems to have been greatly neglected in deciding upon the disease in Kansas. The foot and mouth disease is one of the most active contagions known. The period which elapses between exposure to the virus and the appearance of the first symptoms of the disease is as a rule but two or three days. A very large portion of the exposed animals become diseased, and the plague rapidly spreads from farm to farm. As a result of these characteristics, within a week after the introduction, nearly every animal in the herd shows unmistakable evidence of having contracted it. A very small proportion of the animals may resist the contagion, but the proportion is much less than with most other contagious diseases, and is so small that it does not affect the rule just mentioned.

"The disease at Neosho Falls showed very different characteristics from these. Goodrich's herd suffered in the largest proportion, 65 out of 98, or 68 per cent. being affected. The first case here occurred January 10th, and no others until February 15th, or more than a month later. After this, new cases continued to develop for two or three weeks, but in a lot adjoining that in which the sick cattle were placed, there were twenty calves which remained entirely free from the disease. The isolation of these

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calves was not sufficient to hold the foot and mouth disease for a single day, and it was even said the sick cattle had been driven through the calf lot to water.

"At Pribenow's only eight per cent. of the animals had been attacked, and among a lot of 54 yearlings running with the other cattle there was not one case of disease.

"At Beard's, in a herd of 75 the first animal was lame a week before the second was affected, and then another week passed before the others showed any symptoms. Here only six per cent. of the cattle on the farm were attacked.

SOME OF THE SYMPTOMS.

"The disease at Neosho Falls therefore did not resemble the foot and mouth disease, either in the proportion of the animals attacked or in its rate of extension, or in attacking other species of animals than cattle. If foot and mouth disease had been introduced into the heart of the country in any of the extraordinary ways which were offered to explain its appearance, we surely cannot conceive of its being brought to many widely separated herds at about the same time, especially where there has been no communication between these herds. The symptoms of foot and mouth disease are constitutional and local. The constitutional symptoms are loss of appetite, elevation of temperature, and other signs peculiar to fevers. The local symptoms consist in an eruption of blisters in the mouth, between the toes, about the coronet, and on the udder and teats. In the foot and mouth disease there is usually a very marked increase of temperature, reaching from 104 to 107 degrees. At Neosho Falls the temperature as a rule did not exceed what might reasonably be expected in health. In the foot and mouth disease there is loss of appetite and difficulty of swallowing, but here the universal testimony was that the appetite had remained good throughout, and there was no trouble in mastication or swallowing.

"In the foot and mouth disease there is an eruption of blisters on the mucus membrane of the lips, gums, tongue and palate, which are numerous and painful. It is almost impossible for animals in this condition to eat hay or other dry food, and it is

necessary to support them with gruel. Such animals stand smacking their lips, grinding the teeth and slobbering profusely. In Kansas the mouth symptoms were much less intense than this; some of the mouths presented erosions which were mostly small and very superficial. In Missouri some of the cattle had their mouths involved to a greater degree than any I saw in Kansas, but others with equally bad feet had perfectly sound mouths. Here I saw pieces of the mucus membrane becoming detached, but no blisters.

"The interdigital spaces and the coronet are the seat of eruption in foot and mouth disease; not only is there redness, heat and swelling on those parts, but there is a formation of blisters, and a liquid secretion from the whole affected surface of the skin. Sometimes abscesses form beneath the horn, from which the pus may burrow and cause the loss of the hoofs, or even affect the ligaments and joints, but severe complications in the region of the foot do not occur, except from this cause. With the cattle which I visited the feet presented a very different appearance. The complete death of the foot to the fetlock, or even higher, as occurred in all the worst cases in the West, is altogether unheard of in the foot and mouth disease. In only one case that I have heard of in the West was there any appearance of an eruption of the udder of the affected cow. An eruption of blisters on the udder is an extremely common occurrence in the foot and mouth disease.

"The disease which I investigated had few if any characteristics of foot and mouth disease. Among the whole number there was not a single animal which presented the typical characteristics of this plague. There did not even appear to be a single animal which represented even the typical mouth symptoms or the typical feet symptoms of that disease. There is but one cause known to veterinary science which is capable of producing the condition of limbs which we saw in many of the diseased animals in Kansas and Missouri, and that is ergot. The peculiarities of the disease led me to examine the feed, to learn if any unusual quantity of ergot could be found. The result of this examination was to show that at every one of the farms where the diseased cattle

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were located hay had been fed which contained a considerable proportion of wild rye ergotized to an extreme degree. It is very probable that the cold weather had a considerable influence in developing the effects of the ergot. Many cases occurred soon after a severe ice-storm or sleet, and with the appearance of milder weather new cases ceased to appear, although the same hay was still being fed. The two or three cases in Missouri are an exception to this statement.

ERGOTISM.

"In conclusion, I would state that I have no doubt that the cases which I investigated, and the similar cases which occurred about the same time in other territories, were cases of ergotism. Prof. Stalker, of the Iowa University, and Prof. Faville, of the Colorado Agricultural College, have seen similar cases in their respective States, and concur in the opinion that they are due to poisoning from ergot."

ALUMNI ASSOCIATION OF THE A. V. C.—ITS HISTORY.

W. H. HOSKINS, D.V.S.

A Paper read at the Alumni Meeting, February, 1884.

Gentlemen of the Faculty and Fellow Graduates:

Scarcely ten years have passed since the noble efforts of a few unselfish and self-sacrificing men, amid indifference and deep-cutting criticism, that often was unjust in its source and fell heavily upon faithful and struggling workers, reared up in doubting but true hopes our alma mater, and in that short time it has become a pleasant duty for your fellow-member to write these lines of history of her graduates. Her birth foreshadowed a new era in the history of veterinary medicine and surgery in America, much of which has come to pass, and the future is as full of good promise as it well could be. Her aims and purposes were right, and she has lived in noble grandeur through some of the most trying periods that ever an institution witnessed. All honor to her faithful, zealous and sacrificing laborers, and may she long live after

them, a monument to their memories, for their faithful zeal, unselfish spirits and sacrificing hearts.

Ere I present you this history in detail, I would say that I have no apologies to make because it must come to you in a partial state of completion. For one full year I have labored with as indifferent and uninterested a body of fellow-graduates as almost any school could produce, and in no place, no State, no city, has it arisen to such sad proportions as in the home and birthplace of our noble school. Exhausting the powers of the post, the telephone and telegraph, and personal intercourse; using the parents, friends and guardians, and sometimes strangers to even my fellow-alumni, I feel that on my part nothing has been left undone, and I offer you in gladness and joy the fruits of my pleasant work.

It will be unnecessary here, among you all, to say that our alma mater's aim was good and true men—not many; and the results of her eight years' work are 110 graduates, gathered from seventeen States and territories and the West Indies. Her home and birthplace has well appreciated her ability in educating men for the profession, for she has sent 47 of this number, who have returned to her as workers in the old field but new work of veterinary medicine and surgery, especially the latter; for the former has long lived in a crude way among empirics, cow leeches and blacksmiths. Massachusetts comes next with 17, while the Keystone State follows as a good third with her 12; then comes that always-to-be-depended-upon State, New Jersey, with 11, while the remaining 23 are scattered from the rugged shores of Maine to the golden shores of California. Making a more concise geographical distribution, we find the Eastern States with 27, the Middle States with 73, while the Western sends us but 10 and the West Indies 3. Following up another enumeration, we find the class of '76 composed of 17; '77 with 4; '78 with 6; '79 with 8; '80 with 18; '81 with 18; '82 with 17; and '83 with 22.

A few of those who have entered the profession through our alma mater have turned their attention to other pursuits, so that what I may say hereafter must apply only to the workers in the science. With but few exceptions our men have been peculiarly successful and are enjoying lucrative practices, much personal re-

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spect and broad recognition from intelligent and educated men. In many of the fields of labor where our men have penetrated, the increase in number and value of live stock has been rapid and large, showing, as there are scientific men to care for these fancy and high priced animals, so, in a similar ratio, has been the increase. The new social position accorded to our men has been gratifying, and their acknowledged worth and merit has given a new impetus to our progress. Others have gone into fields where no veterinarian had ever trod, but where intelligence prevails, and soon their people found much for them to do, and the lessened mortality, loss of usefulness, etc., that had before been experienced, now stimulated a large increase in numbers and value of stock used.

Of those from whom I have heard, they have held no less than forty positions of honor, trust or emolument pertaining to their profession. On commissions for examination into contagious diseases there have been eleven appointments from our number, and through their labors much valuable knowledge has been added to the history, nature, causes and course of the various contagious and infectious diseases that our country has had to deal with; alike, the saving of millions in a pecuniary sense; and preserves for us in foreign markets a place for our surplus productions. Two have filled positions on editorial staffs of prominent journals of our country, and thus served a daily usefulness in the spreading of veterinary talent as practitioners, and that, too, often among those who had never met or known competent veterinary service. But above all, and that which is the grandest point we all desire to gain, they gave unto the noble animals over which we exercise dominion relief from their sufferings, and checked the ravages of disease that soon would have made their lives miserable and painful; and who can measure the extent of their usefulness in stimulating new life and bringing new men into the profession through this medium.

Some have ably filled good positions in the surgical department of our College, and while gaining much knowledge for themselves, at the same time were able to facilitate the progress of those around them as students; and others have not forgotten their alma mater, but have come back from time to time to

give daily or weekly examinations into the progress of the classes, and to help those who were daily struggling with trying questions.

On State and city boards of health five graduates from this school have given efficient service, and their usefulness and worth in this regard has many times shown itself in remarkable proportions, and brought before the cities, States and nation the necessity of having such members on their staff. The outbreak of glanders in Newark, N. J., that so long existed as a calamitous danger to her people and the noble animals that must ever do man's bidding, was moved upon by one of our number, and to his vigilance and persistency, in that they have placed the disease under the most rigid control, much credit is due. Many such instances could be enumerated, alike the preservation of our infantile population from the dangers of tubercular and otherwise tainted food and milk. Their vast usefulness in this direction is a subject for much deliberation among us, and we should not wait for boards to call us to these positions, but we should constantly agitate among the people their necessity, and thus arouse them to demand such representation for their safety and welfare.

(To be continued.)

TORSION OF THE UTERUS IN A MARE—DEATH.

By JOHN A. MYER, D.V.S.

I report a case which may be of interest to some of the readers of the REVIEW:

I was called to see a mare a short time since, reported to be pregnant and eleven months gone. History given, that she had been showing colicky pains at different times for about three days, though never failing to eat, and appeared to be in perfect health except when those pains would strike her, which were about as follows:

First day, she was being worked (as was the custom previous to that), and was unusually slow and soon attempted to lie down; the harness was removed, mare turned into a grass-field, laid down,

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rolled a few times, got up and began to graze, and all seemed to be right for about three hours, when signs of uneasiness were again noticed; soon she laid down on her right side, looked around toward her flank and groaned a few times. This lasted for about five minutes, when she got up, began eating as before, thus passing the day with intervals of uneasiness as stated above.

Second day, could see no change, except about every two hours she was taken down similarly to day before.

Third day, the only change noticed was that the interval of quietude was still growing shorter and symptoms a little more urging. When I saw her at nine o'clock p. m., of the same day, she was in a large roomy stable, eating hay at the rack, and at first sight did not seem to be anything wrong. Examination showed temperature 101° , pulse 50 and strong, mammary glands hard and tense, general appearance very good.

At this time she was again taken down. She showed no labor pains, but acted very much as if suffering from colic. Knowing that to be one of the sequels of pregnancy, gave prescription of opiates, directions to give as symptoms required, and to be fed mashy food. Told the owner to observe closely, as she might possibly have trouble at time of parturition.

Three days later I was again sent for, the owner stating that no *labor pains* had been noticed, but that she was still growing worse—quit eating. Examination revealed serious trouble. Temperature 103° , pulse 90 and very weak; hurried respiration, flanks tucked up, and in attempting to lie down did so with all the care possible. Mammæ soft and flabby; made a vaginal examination, hand passing very readily; found the os-uteri closed; by a little manipulation was able to dilate it sufficiently to allow the passage of my hand (at this time uterine contractions were noticed for the first time, though they were not very forcible;) passing along still further, my hand was stopped very abruptly, and in a few moments made a diagnosis of right torsion of the neck of the uterus. I gave an unfavorable prognosis; the animal was destroyed; my diagnosis confirmed by afternoon, which revealed a complete turn of the uterus on its axis, with extensive lesions of metro-peritonitis. The colt had evidently been dead for some

time, as the hair would come off readily; foetus presented anteriorly, both fore legs flexed at knee joints, head and neck bent back and lay under the body of colt.

EDITORIAL.

SANITARY STATEMENTS.

We have several times referred our readers to an important resolution which was adopted by the Fourth International Veterinary Congress, at their session last year at Brussels. The subject of the resolution is one of very material interest, and concerns not only the people of Europe, but our own, in an equal if not a greater degree. We reprint the resolution:

"That between the various States which, by a regular repressive and preventive service, may furnish guarantees of a good Veterinary Sanitary Police, a Convention shall be established, having for its objects—First, to advise other States with as little delay as possible, of the appearance of typhus, pleuro-pneumonia, foot and mouth disease, small-pox, diseases of coit, glanders and farcy, scabies in sheep. Second—To publish a periodical sanitary bulletin upon these diseases, their extent, progress and termination; which documents shall also be inserted in the international bulletin, if deemed advisable....."

We are already in the receipt, from various parts of Europe, of bulletins of similar scope to those contemplated by the resolution, and shall lay them before our readers in a subsequent issue of the *REVIEW* as extensively as our limits will permit. Meanwhile, in order to comply with the suggestions of the resolution of the Congress, and to be able to reciprocate with our foreign colleagues the complimentary attention we have received, by the transmission of the interesting matter which has reached our hands, we propose to collect from every section of the country, or wherever our *REVIEW* circulates or is read, the statements and documents necessary to furnish an intelligible and thorough sanitary and professional index of the vital condition of our domestic animals, with reference to their sanitary status.

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We inclose in the present issue a form of table which we trust all who cherish an interest in this very important subject, as well as those who ought to do so, whether private practitioners, veterinary surgeons possessing a large city and country practice, those who are attached to boards of health, State veterinarians and others, will regard as a personal appeal, and accept our remarks as conveying a professional and fraternal suggestion, which they will not fail to acknowledge with a prompt, available and practical response, such as it will be both a pleasure and a duty to return. We are, of course, not unaware that official, Governmental veterinarians will, probably, not be permitted to furnish us with what we desire. It is quite too much the custom in our land for lofty officials to withhold information of a professional nature, or if they consent to impart it, do so in a manner peculiar to themselves. But as the tables we propose may be filled by any veterinarian, a series of proximately accurate statements of facts may be, nevertheless, secured, which will furnish the public with statistics of the greatest value and interest.

The remarks and suggestions of friends and correspondents on this subject will be welcomed, and shall receive most respectful consideration at our hands.

REGISTER OF GRADUATES OF VETERINARY MEDICINE.

In this day of the unscrupulous assumption of titles and largeness of learned degrees, when any person so electing and desiring to deceive his neighbor may accomplish his purpose by placing after his name a row of initials purporting to be abbreviations of a medical title which he never possessed the right to appropriate, it is difficult for the public to determine between two claimants with the same title, which is the impostor and which the honest man—who is entitled and who is not to the V.S., V.M. or D.V.S. A claimant may perhaps have even matriculated at a veterinary college, but without having even attended a full course of lectures; or he may have been unfortunate (?) in his final examination. He may thus have been either unwilling or unable to complete

his studies, but nevertheless shrinks not from the determination to start in practice, and having issued his card and nailed up his shingle bearing the ordinary title of Doctor and the V.S., V.M., or D.V.S. following his name, goes forth to kill or cure, as the case may be, ostensibly, *secundem artem*.

To avoid, or at least as far as possible, to remedy this evil, we propose to publish the names of all graduates of veterinary medicine that we can discover, and give them to the readers of the REVIEW and to the public. We print, to-day, the correct register of the Alumni of the American Veterinary College, and hope that the Principals or Deans of all the other veterinary schools of this continent will favor us with a complete list of their own graduates. Other members of the profession, graduates of European schools, who will favor us with their names, addresses, date of graduation, and name of their alma mater, will also receive at our hands the same merited publicity. We hope, by this method, to be able to present the public at large a list as nearly correct as possible of the names and addresses of the regular graduates of veterinary medicine in the country, and if any important or considerable omissions occur, it will be obviously attributable to the indifference or oversight of those who fail to report, rather than to remissions or indifference on our part.

AGERSBORG, GABRIEL SMITH, 1882.....	Vermillion, Dakota Ter.
ALDERMAN, HARRY L. 1883.....	East Lexington, Mass.
ALLEN, FRANCIS S., 1884.....	Medfield, Mass.
ARROWSMITH, WILLIAM HENRY, 1883.....	Jersey City, N. J.
ATWOOD, HORACE W., 1882.....	Bröckton, Mass.
AUTENREITH, JOSEPH FERDINAND, 1882.....	Jersey City Heights, N. J.
BAILEY, GEORGE H., 1880.....	Portland, Me.
BATH, HENRY WILLIAM, 1883.....	Staten Island, N. Y.
BELL, LUCIEN T., M.D., V.S., 1876.....	Brooklyn, N. Y.
BLAKELEY, ROBERT P., V.S., 1876.....	Syracuse, N. Y.
BOYD, HENRY B. 1880.....	New Rochelle, N. Y.
BRETHEERTON, W. C., 1883.....	New York, N. Y.
BRUNN, ARMIN E., D.V.S., 1884.....	Brooklyn, N. Y.
BUNKER, MADISON, 1881.....	Newton, Mass.
BURDEN, CHARLES, V.S., 1876.....	New York, N. Y.
BURGET, EUGENE, 1883.....	New York, N. Y.
BURT, WALTER L., 1881.....	Providence, R. I.
CAMPBELL, LEMUEL C., 1883.....	Philadelphia, Pa.

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DUANE,
EVANS,
FIELD, S
FOOTE,
FORCE,
GAENTN
GALBRA
GARDNE
GERTH,
GILBERT
GRIBBLE
HALL, C
HALL, R
HAMLIN,
HANSHE
HANSHE
HARRISO
HELME,
HERE, T
HODGSON
HOLOOM
HOLLING
HOPKINS
HORNBL
HOSKINS
HOUGHT
HOWARD
HUNTING
JACKSON
JEANIN,
JOHNSON

*Deceased

*CARMAN, AUGUSTUS D., 1879.....	Brooklyn, N. Y.
CATTANACH, CHARLES C., 1879.....	New York, N. Y.
COATES, WILLIAM J., M.D., 1877.....	New York, N. Y.
COCHRAN, DAVID W., 1880.....	New York, N. Y.
CORLIES, JAMES C., 1876.....	Newark, N. J.
COSGROVE, JOHN B., V.S., 1876.....	Worcester, Mass.
*COWHEY, THOMAS C., 1780.....	St. Louis, Mo.
CRANE, LEMUEL M., 1881.....	New York, N. Y.
CRITCHERSON, WILLIAM DANA, 1883.....	Norwich, Conn.
DROWLEY, CHARLES W., 1876.....	St. Louis, Mo.
DENSLOW, IRVING S., 1883.....	New York, N. Y.
DEVOR, WILLIAM STOUGHTON, 1881.....	New York, N. Y.
DIXON, DAVID J., 1881.....	Hoboken, N. J.
DOUGHERTY, JOHN, 1881.....	New York, N. Y.
DOUGHERTY, WILLIAM, V.S., 1876.....	Baltimore, Md.
DUANE, JOHN JR., 1881.....	New York, N. Y.
EVANS, CHRISTMAS 1883.....	Racine, Wis.
FIELD, SAMUEL S., 1878.....	New York, N. Y.
FOOTE, J. HURBERT, M.D., 1880.....	New York, N. Y.
FORCE, JULIUS C., 1878.....	Newark, N. J.
GAENTNER, CHARLES C., 1881.....	Bryn Mawr, Pa.
GALBRAITH, A. D., 1884.....	Greensburg, Ind.
GARDNER, JULIUS EDWARD, 1883.....	Greenfield, Mass.
GERTH, JULIUS, JR., 1880.....	Newark, N. J.
GILBERT, ELWOOD G., 1884.....	Riegelsville, Pa.
GRIBBLE, WILLIAM H., D.V.S., 1884.....	Churchville, N. Y.
HALL, CHARLES H., M.D., 1876.....	Cambridgeport, Mass.
HALL, RALPH W., 1880.....	New York, N. Y.
HAMLIN, JOHN, D.V.S., 1884.....	Afton, N. Y.
HANSHAW, ELISHA, JR., 1880.....	Brooklyn, N. Y.
HANSHAW, FRANKLIN JOSEPH, 1883.....	Brooklyn, N. Y.
HARRISON, ROBERT, 1881.....	Boston, Mass.
HELME, ARTHUR H., 1884.....	Miller's Place, (L. I.) N. Y.
HERR, THOMAS J., 1879.....	New York, N. Y.
HODGSON, JOSEPH R., 1883.....	Brooklyn, N. Y.
HOLCOMBE, A. A., 1876.....	Fort Leavenworth, Kan.
HOLLINGWORTH, WALTER G., 1884.....	Utica, N. Y.
HOPKINS, JAMES, D.V.S., 1876.....	Cheyenne, Wyo.
HORNBLLOWER, WALTER H., 1880.....	Brooklyn, N. Y.
HOSKINS, W. HORACE, 1881.....	Philadelphia, Pa.
HOUGHTON, GEORGE SHERBROOKE, 1882.....	New York, N. Y.
HOWARD, LESTER HERD, 1882.....	Boston, Mass.
HUNTINGTON, FRED. WILLIS, 1883.....	Woodford, Me.
JACKSON, OSCAR C., 1880.....	Jamaica, (L. I.) N. Y.
JEANIN, AUGUST JOSEPH, 1882.....	Nevarre, Ohio.
JOHNSON, SAMUEL K., 1883.....	New York, N. Y.

*Deceased.

KAIN, FRANKLIN MAY, 1883.....	York, Pa.
KAY, RICHARD, 1883.....	New York, N. Y.
KEEFER, GEORGE HENRY, M. D., 1882	Hillsdale, Mich.
KEMP, JAMES SAMUEL, Jr., 1882.....	New York, N. Y.
KLEINDORF, WILLIAM H., 1879.....	Middletown, Pa.
KNOWL, MORTON E., 1884.....	Clinton, Ind.
KROWL, I. N., 1884.....	Uubany, Ohio.
LEIGHTON, JOHN ALBERT, 1882.....	New York, N. Y.
LEVI, EMIL S., 1880.....	Dubuque, Iowa.
LIGHT, DANIEL K., 1880.....	Palmyra, Pa.
LOBLEIN, ELDON, 1884.....	New Brunswick, N. J.
MANZ, WILLIAM, 1882.....	New York, N. Y.
MARTENET, WILLIAM HOWARD, 1882.....	Baltimore, Md.
MARTIN, ALFRED F., 1881.....	Zanesville, Ohio.
MATTISON, MAHLON G., 1880.....	Pittstown, N. J.
McKENZIE, ALEX., 1881.....	Cleveland, Ohio.
McLEAN, RODERICK A., 1879.....	Brooklyn, N. Y.
McNICOL, JAMES E., 1881.....	New York, N. Y.
MERCER, ELMORE R., 1881.....	Bermuda, W. I.
MICHENER, CHARLES B., V.S., 1876.....	New York, N. Y.
MILLER, WILLIAM B. E., 1879.....	Camden, N. J.
MORSE, ARTHUR B., 1883.....	Des Moines, Iowa.
MOULTON, CHARLES LEROY, 1882.....	Fort Reno, Ind. Ter.
MURRAY, JOHN J., 1881.....	New York, N. Y.
MYERS, JOHN ALLEBAUGH, 1883.....	Linville, Va.
MYERS, JOHN C., Jr., M.D., V.S., 1876.....	Cincinnati, Ohio.
*NOSTRAND, PETER, V.S., 1876.....	New York, N. Y.
NOYES, WILLIAM B. C., 1883.....	Roxbury, Mass.
OTTO, MARTIN J., 1884.....	New York, N. Y.
OUTERBRIDGE, THEODORE, V.S., 1876.....	Bermuda, W. I.
PARSONS, FRANK H., 1881.....	Rochester, N. Y.
PEABODY, CHARLES H., 1877.....	Providence, R. I.
PENNIMAN, GEORGE B., 1877.....	Worcester, Mass.
PENDRY, WILLIAM HAMILTON, 1883.....	Brooklyn, N. Y.
PETERS, AUSTIN, B.S., 1883.....	Boston, Mass.
PIERCE, MATTHEW A., 1884.....	Paterson, N. J.
RISLEY, FRANK, 1882.....	Waterville, N. Y.
ROBERTSON, JAMES L., M.D., V.S., 1876.....	New York, N. Y.
ROBERGE, FRANKLIN F., 1880.....	New York, N. Y.
ROGERS, THOMAS B., 1879.....	Westville, N. J.
ROSE, ALVORD H., 1878.....	Staten Island, N. Y.
ROSE, WILLIAM H. 1880.....	Washington, D. C.
ROSS, EDWARD C., 1884.....	New Haven, Ct.
ROWLAND, EVERETT WOODHULL, 1882.....	Monroe, Wis.
ROWLAND, WARD BEECHER, 1882.....	Wilmington, Del.
RYDER, J. ELMER, 1884.....	Jamaica, (L. I.) N. Y.

*Deceased.

RYDER,
SAUNDE
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SOHMID
SHERMA
SNYDER
SMITH,
SPRANK
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RYDER, JAMES F., 1883.....	Rondout, N. Y.
SAUNDERS, FRED., 1882.....	Lynn, Mass.
SAUNDERS, JOHN S., 1876.....	Boston, Mass.
SCHMIDT, WILLIAM G., 1878.....	Newark, N. J.
SHERMAN, WALTER A., 1881.....	Lowell, Mass.
SNYDER, ORVINI W., 1884.....	Lena, Ills.
SMITH, JOHN J., 1879.....	Chambersburg, Pa.
SPRANKLIN, F. W., 1884.....	Baltimore, Md.
*STOCKER, CHARLES V., V.S., 1876.....	Salem, Mass.
STOUTE, RICHARD A., D.V.S., 1884.....	Barbadoes, West Indies.
*TRAVER, ERNST, V.S., 1876.....	Jobstown, N. Y.
TRAYER, FRANK, 1882.....	Altoona, Pa.
VALERIUS, NICHOLAS PIERCE, 1884.....	Fort Atkinson, Wis.
VOGT, ANDREW G., 1884.....	Newark, N. J.
VREELAND, HAMILTON, 1884.....	Asbury Park, N. J.
TOURTELLOTTE, LINCOLN H., 1881.....	Idaho Springs, Colo.
WALTON, SHARPLESS M., 1881.....	Avondale, Pa.
WEEKS, ARTHUR P., 1880.....	Paterson, N. J.
WHITE, THOMAS ELDER, 1884.....	Lamonte, Mo.
WINCHESTER, JOHN T., B.S., 1878.....	Lawrence, Mass.
*WING, EDGAR R., 1880.....	Needham, Mass.
WEAY, WILLIAM H., 1878.....	Yonkers, N. Y.
ZUILL, WILLIAM L., 1880.....	Philadelphia, Pa.

PHENIC ACID AND ITS PREPARATIONS IN VETERINARY MEDICINE.

Since the introduction of the antiseptic treatment of wounds by the method of Lister, the carbolic acid dressing has found its way, to a greater or less degree, from the domain of human into that of veterinary surgery, and though a thorough Lister dressing may be found difficult of application upon our domestic animals, many veterinarians are flattering themselves with the persuasion that they have obtained excellent results from its adoption. With the successes, however, must be associated many failures, which must be taken into the account as counterbalancing the advantages secured.

To what cause these failures are to be attributed is a question involving more or less difficulty in its answer.

From remarks occurring in the papers which treat of human medication, it would seem evident that one of the principal causes

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of disappointment has been found in the alleged or suspected impure condition of the particular preparation which has been used, and it has been claimed that the employment of pure carbolic acid, or the phenic acid proper, would not have been so frequently followed by bad results.

As an established fact, phenic acid, (prepared by the process of its discoverer, Dr. Declat), has now taken a high place among the adjuncts of both human and veterinary surgery; and our conclusions from the few experiments which we have personally made, have been of a highly satisfactory character, inasmuch as they have fixed in our judgment the conviction that it offers to the veterinarian an agent, of great excellence and efficiency, for the dressing of wounds in the true antiseptic manner.

Besides the solution of pure phenic acid which we have ourselves employed, we have dressed many wounds with iodo-phenol—a preparation of iodine and phenic acid in combination—and with this have obtained, in the treatment of cartilaginous quittor, results which, if they should multiply by repetition, would to a great extent relieve us of the necessity of the surgical operation familiar to all of us.

The report of two serious cases of the disease mentioned, thus treated, are given in our present issue, and will, we believe, largely encourage our colleagues to test this comparatively new preparation.

PHYSIOLOGICAL PATHOLOGY.

NEW EXPERIMENTS IN RABIES.

BY MESSRS. PASTEUR, CHAMBERLAND AND ROUX.

(Read before the Academiè des Sciences of Paris.)

(Continued from page 83.)

6th. In my preceding report on rabies, I stated that we had found cases of the disappearance of the first rabid symptoms with a reappearance of the disease in the same dog after a long interval. We have since noticed the existence of the same fact in rabbits, as in the following example: A rabbit, taken with rabid

paralysis thirteen days after trephining, recovered completely during the succeeding days. In forty-three days the paralysis reappeared, and death by rabies occurred on the forty-sixth day.

7th. These facts, however, are of very rare occurrence both in the rabbit and the dog. But we have found them taking place much more frequently in fowls, while either the death of the animals, of course, anticipated any possible return of the disease, or it failed to take place at all, as we have previously reported in respect to a dog, whose case was described in a former communication.

I may here remark that the hen, when affected with rabies, never shows very violent symptoms. The manifestations are merely dullness, anorexia, posterior paralysis, and often great anæmia, characterized by the pale coloration of the comb.

8th. We have watched very carefully for any facts which might be of value in confirming certain assertions recently made referring to a presumed attenuation of the rabid virus by the action of cold, as well as the pretended passage of rabies from the mother to the fœtus, and although our observations on those two points have been much more numerous than those which have been relied upon to advance these theories, we have, so far, obtained none but entirely negative results.

9th. The certainty of the results of the inoculation of rabies by intravenous injection, sufficiently proves that the hypothesis of the passage of the virus from the periphery to the nervous centers through the nerves, cannot be accepted as describing the only method of propagation of the virus, and that, in at least a majority of cases, the absorption of the virus takes place through the circulatory system.

In any case, however, the theory is open to objection. For example: to inject the rabid virus into a vein, a traumatism is necessary; the skin must be divided and the vein exposed. May it not, then, be supposed that the virus introduced into the circulatory system, and returning to the wound, must come in contact there with nerves or open lymphatic vessels? The following experiment removes this objection at once. We have at various times inoculated the rabid virus into a vein of the ear, and then

immediately amputated that organ, with the thermo-cantery, below the point of inoculation, and in every instance rabies followed. Still, thermo-cauterization leaves no true wound ; all the divided structure is burned.

I hasten these remarks in order to reach a part of the subject which most of all deserves our attention.

The Academy has not forgotten that the discovery of the attenuation of viruses, in connection with its applications, which have been employed for the prophylaxy of certain diseases, has thrown much light on this capital fact of the possible experimental production of various degrees of virulency for a single virus.

Rabies is pre-eminently a virulent disease, and the nature and effects of its virus are possessed with qualities so mysterious that the desire becomes natural and irresistible to ascertain whether the rabid virus may not also be capable of exhibiting various degrees of propagating power. Our experience now authorizes an affirmative answer to this question. Without referring to various methods which are still the subjects of study and experiment, we have found that rabid virus, passing through various species of animals, is more or less modified in its virulency. Rabbits, guinea pigs, fowls and monkeys are susceptible of rabies. When, by successive transfers, the virus has reached a certain point of fixity peculiar to each species, the virulent power of the matter is far from being the same in all, differing notably from that of the canine subject, the virulency of which has regulated itself by numerous transmissions from dogs to dogs, from time immemorial. Spontaneous rabies finds no place in my convictions.

We certainly have a virus which communicates rabies to the rabbit in seven or eight days, with such a degree of certainty that we are enabled by guess, so to speak, to name the duration of the incubation, determined by a change in the temperature or the appearance of the first external symptoms of the disease. We also have a rabid virus which communicates the disease to pigs in five or six days with no less certainty in respect to the duration of its incubation.

Before that point of fixity of which I have spoken has been reached in the various species of animals, each for itself, the

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virulency is undergoing constant change. We believe that for one of the species, other things being equal, the virulency is in inverse proportion to the number of days of incubation, and that generally the proportions of the inoculated virus are as nearly equal as possible when a similar mode of inoculation has been practiced. In young animals the duration of incubation is usually somewhat less than in adults.

As we entirely ignore the conditions that the rabid virus of the dog would exhibit in the human organism after successive passages from man to man, we have been obliged to experiment with rabies passing from monkey to monkey. At a later date I hope to lay before you the results of this study, which are very interesting though incomplete.

I have already said that I have in my laboratory several dogs which are refractory to rabies, by all modes of inoculation. I may add, to-day, that they are also refractory to all descriptions of rabid virus. At the time of my last report upon rabies, however, we were obliged, on account of the imperfect condition of our observations at that time, to leave unanswered the question whether these dogs were naturally refractory to rabies, or only by some peculiar conditions resulting from the operations to which they had been previously subjected.

I now believe we can give a more accurate answer to this question, though it must still be with some reserve. I believe myself authorized to say that our dogs were not refractory to rabies be their natural constitution. We have, indeed, found the quite practicable way to obtain refractory dogs in as large number as one can wish. Still, in consideration of the possibly great duration of rabies, which at times throws some doubt upon the experiments of control, I beg the Academy to accept for some time this assertion, and allow me to simply state at present that the refractory condition is obtained by a system of inoculation of virus of various degrees. We have at present twenty-three dogs which may without danger receive any virulent inoculation.

To be able to render dogs refractory to rabies would not only be a solution of the question of the prophylaxy of this affection in that animal, but also in man, as man never contracts rabies ex-

cept from the bite of some animal whose virus is received directly or indirectly from the dog.

May not human medicine be able to take advantage of the lengthened incubative stage of rabies, to attempt to establish in that interval of time, before the appearance of the first rabid symptoms, the refractory condition of bitten individuals? But before this hope can be realized much remains to be done.

In beginning the study of rabies, my principal object was to search and prove, if possible, the power of experimentation in the knowledge of virulent or contagious diseases. The Academy has no doubt already observed that the preceding observations, as well as subsequent investigations, have been obtained without necessary recourse to the discussion of the question, or even the knowledge of the facts of the contagiousness of the disease.

AMERICAN VETERINARY COLLEGE—HOSPITAL RECORDS. SIMPLE FRACTURE OF THE RADIUS.

By J. E. RYDER, House Surgeon, A. V. C.

A sorrel gelding, ten years of age, was brought to the hospital on the 8th of April, with the following history: At about three o'clock P.M. of that day, while standing in the street, he became suddenly frightened, and while rearing fell heavily upon his near side on the curbstone. He was immediately unharnessed and allowed to get up, but upon standing was found very lame and unable to move. An ambulance was immediately summoned, and he was brought to the College.

Upon examination, the animal was found standing up, with his left leg in the normal position and without swelling, but betraying excessive pain on the slightest manipulation on the lower part of the radius. By careful handling crepitation was detected, and a diagnosis made of simple longitudinal fracture of the radius without displacement, the lower lesion extending upward along the length of the bone. Everything seemed so far favorable that a corresponding prognosis was given, and the owner being desirous of having the animal treated, a splint of plaster of

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paris with long tick bandages was applied, supported by four steel splints, running upward in the long axis of the injured bone. He was then allowed to walk to his stall and placed in slings. The next day, everything being well in place, the apparatus was strengthened on the outside with three wound splints supporting the parts outward, inward and behind, they being kept in place by a snugly tied flannel bandage.

On the 10th he seemed to have severe lancinating pains, but everything otherwise appeared normal, including temperature, pulse, respiration and appetite.

The pain subsided during the following day.

After a week's treatment, however, the owner decided to give him up. He was allowed to remain in the stall up to the 28th of the month, when, preparatory to destroying him, he was walked into a box stall close to the operating room of the hospital, and let loose.

On the 1st of May it was noticed that a slight change had taken place in the off fore leg, consisting in an expansion of the tendons passing behind the knee of that extremity. It was manifest on account of the greater amount of weight of the body thrown upon that leg. This condition continued gradually to increase, until on the 5th of May the parts presented a very peculiar appearance: the knee was bent forward in such a manner that there was an extreme concavity of the line, normally vertical, of that joint. Indeed, a plumb line dropping from the point of the shoulder and passing about $5\frac{3}{4}$ inches in front of the toe, showed the carpus to be about $19\frac{1}{2}$ inches posterior to it. Such measurements can give an idea of the great change in the condition of the part and of the expansion of the tendons. The animal was then destroyed.

On post mortem it was found that in the off fore leg the tendons were stretched to the utmost, and were in a bruised and discolored condition, presenting, however, no laceration or separation in their continuity. In the near leg, the muscles surrounding the radius being removed, the partially united fracture was exposed. It extended from the lower to the upper third of the bone, in the direction of the long axis of the radius. Process of union had

already fairly started upon the front and posterior parts of the bone, but the lower extremity on its posterior face showed evidence of either a want of reparative process or of recent separation between the ends of the bone, which might have taken place when the animal was thrown down to be destroyed.

The interesting points of this case are seen in two important facts. The possibility of fair success in the treatment of simple longitudinal fracture of a long bone, a fact of which is already well established, is the first; and the second is the illustration of the necessity of keeping an animal under treatment in a similar case, in slings; not only to keep him quiet, but also to relieve him from carrying an excess of weight on the sound leg, an object which cannot be accomplished if, as some practitioners recommend, the animal is turned loose in a box stall.

RAPID RECOVERY OF TWO CASES OF CARTILAGINOUS QUITTOR BY ANTISEPTIC TREATMENT WITH IODO-PHENOL.

By MR. NOCARD.

CASE No. 1.—A bay mare, six years of age, had been suffering with cartilaginous quittor for over six months, having on the near fore foot two large fistulous tracts, connected together, and running obliquely across the cartilage. The discharge was quite abundant, and the animal, who had been submitted to several forms of treatment, had become quite lame.

Before deciding to operate on her by the removal of the cartilage, it was suggested to try the antiseptic dressing with iodo-phenol.

On the 21st of March, the shoe being removed and the hair clipped short, the foot was thoroughly washed and soaked in a solution of carbolic solution, 1 in 40, and dressed as follows: The solution of iodo-phenol was injected several times into the fistulæ and a dressing of oakum saturated with carbolic solution applied. A piece of oil silk was applied, large enough to envelope the dressing, the whole being kept in place by a moderately tight bandage. Directions were given to soak the foot several times a day in carbolic solution.

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The foot was dressed daily in the same manner until the 30th, when the fistulæ were found to be slowly closing and the discharge diminishing; and on the 8th of April, seventeen days from the beginning of the treatment, the mare was discharged. The wounds were almost entirely healed, and she was quite able to resume her work.

CASE 2.—Was a bay gelding, five years old. He had been under treatment for the last three months, and was discharged a week ago as cured, but became very lame the second day after he was shod. The part around the coronet of the near hind foot had become considerably swollen, an abscess had formed and ulcerated; and on the 27th of March he was brought to the hospital for advice and treatment.

When admitted he had a fistula about two inches in length, running obliquely downwards, on the cartilage, and opening on the side of a wound about one and a half inches in size, a short distance above the coronet.

The treatment decided upon was similar to that of Case No. 1, viz.: antiseptic washing and soaking in phenic solution, injection of iodo-phenol, carbolized oakum for dressing, the whole covered with oil silk, and protected with a snug, tight bandage.

This was renewed daily for a few days, when the parts seeming to improve so rapidly, and the wound having considerably healed, the fistulæ diminished and the lameness improved, the dressing was changed only every second, and soon, every third day. He was discharged on the 16th of April, radically cured, and has since been regularly at work.

EXTRACTS FROM FOREIGN JOURNALS.

CHEMICAL AND EXPERIMENTAL FACTS ILLUSTRATIVE OF THE HISTORY OF THE HEREDITY OF TUBERCULOSIS.

BY MESSRS. L. LANDOUZY AND H. MARTIN.

Many modern pathologists deny that persons are ever born tuberculous, but admit that one may be born *liable* to it; that what the child born of tuberculous parents inherits is not tuberculosis, but merely a predisposition to the development of tuber-

cles. They have experimented in order to discover whether a tuberculous germ does not pass in nature from the mother to the offspring, or to the placenta, in the same manner that chicken cholera and anthrax are transmitted, according to the teachings of Messrs. Arloing, Cornevin and others. The result of their observations is thus given: A woman in the advanced stage of phthisis, a few days before dying gave birth to a foetus of six-and-a-half months, who died the same day. A piece of the lung of this foetus, apparently healthy, was introduced with ordinary carefulness into the peritoneum of a guinea pig. Four and a half months later the animal died tuberculous. The same result was obtained with a five months foetus of another woman dying of phthisis. Pieces of lung and of placenta, and a portion of cardiac blood, in this case transmitted tuberculosis. The same result is obtained by the inoculation of tissues taken from the foetus of a healthy guinea pig, born from tuberculous parents.

Conclusions.—There exist in the young offspring of tuberculous individuals a latent period of tuberculosis, which for a period of one or two years leaves the subject free from morbid manifestations, the germ meanwhile preserving an existence in the tissues of the offspring, until its development is made manifest by an attack of tuberculous meningitis or broncho-pneumonia.

The maternal transmission being thus demonstrated, can the tuberculous father transmit the infection directly to the ova of the healthy mother, she, meanwhile, remaining healthy? Can the sperm of a tuberculous male transmit tuberculosis by direct inoculation?

The authors took from a guinea pig which had died from general tuberculization, but whose testicle was apparently healthy, some testicular pulp, and introduced it into the peritoneum of an adult guinea pig. Two months later this animal died spontaneously with generalized tuberculosis. But was it the blood, the lymphatic fluid or the sperm which contained and conveyed the germ? Two grammes of a mixture of salt water with the contents of the vesiculæ seminales of a tuberculous pig were injected into the peritoneum of another, three months later. This animal had generalized tuberculosis which could be transmitted.

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The conclusion of the authors is, that besides the heredity of constitutional predisposition, acquired by the offspring from the parent, there is also the heredity of the seed transmitted from the parents to the child.—*Revue d'Hygiene*.

LACERATION OF THE SMALL COLON BY AN ÆGAGROPHILE.

By MR. PALAT.

A mare aged eleven years was taken with light colic one morning. She had eaten her breakfast, and showed the presence of slight pains by pawing. An hour later she laid down, apparently quiet. Towards evening she stood up, head down, with weak pulse and somewhat tympanitic, and as she was about to be punctured she fell down and some two hours later died.

At the post-mortem she was found in a fat condition. The peritoneal cavity, when opened, allowed the escape of a large quantity of gas, as usually occurs in cases of rupture of the stomach or of the intestines. The last condition was soon recognized by the foetal matters found floating in the cavity and near the pelvis, by the reddened and injected condition of the peritoneum, and the large effusion present. The small colon presented a laceration, with blackish and bloody edges. The mucous membrane was red, thickened and bloody. This perforation must have been made by a calculus or an agagrophile, which last was found. It was flattened in form and weighed 600 grammes. In examining the large colon, towards the right hypochondriac region, a large mass was felt, which seemed to close up the opening of the organ. On cutting down upon it another mass weighing four kilogrammes was removed. It was somewhat melon-shaped and slightly conical in form, with a large base. They were composed of vegetable threads and alimentary remains, mixed with calcareous and ammoniacal and magnesian salts.—*Recueil de Medecine Veterinaire*.

GLANDERS IN A DOG.

By MR. MENARD.

A small Danish bitch, five years old, had fed on raw meat while at the breeding farm of the "Jardin d'Acclimatation," from

the 28th of August to the 10th of October, 1883. She returned to her kennel and was then fed with biscuit, bread and cooked meat. Towards January she was losing flesh and had several little sores on her back, but which were overlooked. In February she had another round wound, the size of a one-franc piece, on the right side over the ribs, and at last, on the 3d of March, she had another. None of these appeared to heal. The last was over the left ribs, round in form, and discharging a liquid, greyish pus. It was well defined, and of a diameter of two-and-a-half centimeters. There was no discharge and no enlargement of the maxillary glands.

It was then that the author thought of glanders, and her pus was inoculated to a guinea pig.

The author's conclusions are: 1st. If the disease was contracted while she was at the breeding farm, the period of incubation had been of more than two months' duration.

2d. It is the second case which proves the contagiousness of glanders by the injection of raw meat.

3d. In the dog glanders seems to have only a cutaneous manifestation.

4th. Glanders is transmissible by inoculation from the dog to the guinea pig.

THE FIRST CASE OF ACTINOMYCOSIS OBSERVED IN FRANCE.

By MR. NOCARD.

This case is recorded in the transactions of the *Société Centrale de Médecine Vétérinaire*. In reporting it, Prof. Nocard, alluding to the history of the disease and to the reports upon it which have recently appeared in all veterinary journals, observes that, so far, this is the first case reported in France. He attributes the absence of information on the subject in that country to the fact that the disease, being very slow in its development, and for that reason not interfering with the general use for meat of the animals, has not affected the interests of the owners, and the veterinarian for that reason has not yet been appealed to to investigate and remedy the evil.

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This is so far true, he says, that during the fifteen years which he has been attached to the clinic of Alfort, he does not remember to have seen a single case brought to the consultation. Inquiries made by him of other veterinarians have failed to furnish him with indications of the frequency of the disease.—*Recueil de Medecine Veterinaire*.

PROPOSED PRESENTATION.

MEDAL TO H. BOULEY.

To commemorate the honor which Mr. H. Bouley has received in being called to the Presidency of the Academie des Sciences of Paris, the veterinary professors of France have started a subscription to have an artistic medal made, to be presented to this world-renowned veterinarian, and we have been requested by the committee who has charge of the movement to insert the enclosed circular. We do it with much pleasure and hope that some of our veterinarians will willingly join in the movement. The subscription is of sixteen francs (about \$4), and can be sent to us for remittance.

MONSIEUR ET CHER CONFRERE,

Le 26 janvier dernier, un banquet a été offert à M. H. BOULEY, sous la présidence de M. PASTEUR, pour célébrer l'honneur insigne que l'Académie des Sciences venait de faire à notre Maître, en le nommant son Président pour l'année 1885.

Cette manifestation ayant dû suivre de très près l'élection pour conserver son à-propos, le nombre de ceux qui ont pu y prendre part s'est trouvé forcément limité aux Professeurs de l'Ecole d'Alfort et aux Vétérinaires civils et militaires des trois départements de la Seine, Seine-et-Oise et Seine-et-Marne.

Avant de se séparer, les assistants à ce banquet ont exprimé le vœu unanime qu'une médaille commémorative perpétuât le souvenir de l'événement glorieux pour notre profession qui venait d'être fêté; et nous avons pensé que ce serait répondre au sentiment général de la grande famille vétérinaire que de convier tous ses Membres à se joindre à nous pour offrir au savant Maître, dont un grand nombre de nous sont les élèves, et dont, tous, nous nous honorons, un témoignage d'affectueux respect et de reconnaissance pour son œuvre scientifique et professionnelle.

Nous venons, en conséquence, cher Confrère, vous demander votre concours pour la réalisation du programme suivant:

1° Offrir à M. H. BOULEY une médaille, d'une grande valeur artistique, frappée à son effigie, et portant le millésime de l'année où les suffrages de

l'Académie des Sciences ont appelé au fauteuil de la présidence le représentant de la Science Vétérinaire dans cette grande Assemblée ;

2° Donner à chaque souscripteur une reproduction en bronze de cette médaille, gravée à son nom, et un exemplaire du compte rendu de la fête du 26 Janvier, avec la liste de tous nos adhérents.

Nous consacrerons ainsi et nous perpétuerons le souvenir d'un événement dont nous ressentons tous un légitime orgueil.

Veillez agréer, Monsieur et cher Confrère, l'assurance de nos meilleurs sentiments.

Les Membres du Comité d'organisation :

BARON, Professeur à l'Ecole d'Alfort.

BLANC, Vétérinaire à Paris.

CAPON, Vétérinaire principal de 1^{re} classe.

MOLLEBEAU, Vétérinaire à Charenton.

WEBER, Vétérinaire à Paris.

To the Editor of the American Veterinary Review.

SOCIETY MEETINGS.

NEW YORK STATE VETERINARY SOCIETY.

The regular monthly meeting of the New York State Veterinary Society was held in the lecture-room of the American Veterinary College, New York, on Tuesday evening, May 13th, 1884, President Dr. A. Liautard in the chair.

The members present were Drs. Robertson, Burden, Liautard, Coates, Foote, Field, Cochran, Johnson, Bretherton, Charum, Ryder and Allen, New York; Drs. L. McLean, Pendry, R. McLean and Newman, Brooklyn; Dr. Bath, Staten Island; Dr. Dixon, Hoboken; and Dr. Boyd, New Rochelle.

On motion, the reading of the minutes of the last meeting was laid over.

Dr. Field, the essayist of the evening, then read a lengthy paper on "Examination of Horses as to Soundness," which gave rise to a long discussion. The use of the clinical thermometer in examinations for soundness was strongly advocated, the essayist holding that where the temperature ran over 101°F. the examination, for the time being, should be postponed. In answer to Dr. L. McLean as to whether he would reject altogether if he found the temperature much increased, the essayist said, where he

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found it over 101°F . he would want to be well satisfied as to the cause before passing. If it was up to, say, 104°F . without any apparent cause, he would have the animal put into a stall for two or three hours, and examine again, but if confined to the then present time, he would certainly not pass, as a temperature of that height indicated something wrong. Dr. R. McLean considered that considerable allowance ought to be made for excessive exercise. He had scarcely ever found the temperature below 101°F . in dealers' stables, and would not reject a horse who had a temperature of even 104°F . simply on that account. Dr. Robertson spoke of Dr. Dougherty, of Baltimore, having given this question considerable attention, he having found that after a hard gallop the temperature was very much increased, going as high as 104°F . Dr. R. McLean expressed his belief that that indicated a state of congestion. Dr. L. McLean did not agree with that, contending that there could be a temperature of 104°F . without any pathological lesions. The essayist disagreed with this, and stated he did not consider a horse should be examined for soundness just after he had had a hard gallop; and in answer to Dr. Bath, said we might consider the temperature normal if not over 101°F . Dr. Johnson, in speaking of exercise as one of the causes of elevation of temperature, stated he at one time took the temperature of thirty horses at night, just after they had finished their work, and found it ran from $102\frac{1}{2}^{\circ}\text{F}$. to $103\frac{1}{2}^{\circ}\text{F}$., and on taking it again in the morning, found them all normal. Dr. Burden expressed the opinion that when the temperature stood at 104°F . it indicated some disease. Dr. Charum took the same view. Dr. Coates was of the opinion that much depended upon whether the horse sweat freely or not. From those horses that did not he would expect to get a higher temperature than from those who did, and cited a case on record in human practice, where a temperature of 123°F . was discovered, without any disease being present or following.

Dr. Cochran raised the question whether the toes being turned in or out was sufficient to reject a horse that was being examined for soundness. He believed, himself, that it was. Dr. Field said he would qualify his certificate in either case. Dr.

L. McLean did not consider the turning of the toes, either one way or the other, of itself an abnormal condition. He had seen certificates of unsoundness on account of "knee-spring." The essayist said he would certainly reject where he found that was the case, holding it was due to contraction of the tendons.

The question of taking off the shoes, as practiced in England, to see if the horse had corns, was referred to by Dr. Robertson. Could we do this with dealers' horses? Dr. Pendry doubted if we could. Supposing the blacksmith who was called in to do this, in putting on the shoe again had the misfortune to prick the foot, would the dealer be willing to pay any expenses that might result? Where would the liability rest? Would the dealer or buyer run the risk? Would the examining surgeon or blacksmith be liable? Much would depend as to whether it was really necessary to take the shoes off. He held it was good practice to do so, but the question was, Was it really necessary? Dr. L. McLean made a practice of doing so, and considered it well worth the trouble. Dr. Coates contended it was not always necessary, as all horses with corns showed more or less lameness. Dr. Pendry could not agree with Dr. Coates, and spoke of a horse which he knew had corns, yet traveled sound. Dr. L. McLean asked if there was not a period of a corn where no lameness was shown. Dr. Coates admitted that there was, and considered when horses with corns did not show lameness it was due to their being trotted only a short distance. Dr. Field said there were times when this could not be otherwise. Dr. Coates held that no horse should be passed that had not been examined both after and before he had been freely trotted. As to the question of bruised heel, considerable allowance would have to be made. If it was not accompanied with lameness he would pass.

Many other points were discussed by the members present, to a late hour, and a motion was made to continue the discussion at the next meeting of the Society, but an amendment was carried that it be closed by the Chair. Dr. Liautard said the subject of the paper was one that afforded an almost endless field for discussion, much of which had been gone over many times. The question was always an interesting one to the profession, as there

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were so many different opinions on the many points raised. He thought it perhaps best to close the discussion and not carry it forward to another meeting, at which the Society had been promised another paper. In referring to the paper he would say that he did not consider a horse fit to be examined for soundness when he had a temperature of 104°. He had lately been requested to examine a horse whose temperature was at that point, and he had returned him to the owner with the request that he be sent for examination again in a few days, which was done. The horse proved both sound and healthy. As to the question of taking off the shoes to examine for corns, he did not consider it necessary except when there was room for doubt. However slight that doubt might be, he would certainly have the shoes removed. In the matter of liability, when giving a warranty of soundness, he considered that if it was stated that the horse *was* sound, it would leave the surgeon liable if there existed any unsoundness that he had failed to detect. What we had to do was to see if we could discover any unsoundness, and if we could not certify to that effect. He considered that all horses examined for soundness should be under the examiner's own eye for at least two hours.

Dr. R. McLean exhibited before the members of the Society the tuberculous lung of a steer from Texas, also the kidneys and a portion of the aorta of a colt nine months old, the former being about three times their natural size, and the aorta entirely obliterated. A vote of thanks was extended, with a request for a written report of the latter case, which was promised.

A vote of thanks was tendered the essayist for his paper.

The Board of Censors reported progress in the matter of certificates of membership, and in favor of Drs. Raymond and Arrowsmith for membership. The latter was elected an active member and the former an honorary member, and on motion the fact and resolution of his so being elected was ordered to be engrossed and presented to him.

Application for membership was received from V. L. James, V.S., Springfield, and U. E. Cuff, D.V.S., New York, both of which were referred to the Board of Censors.

Prof. James L. Robertson was appointed essayist for the next meeting, which was accepted.

Meeting adjourned.

W. H. PENDRY, Secretary.

VETERINARY MEDICAL ASSOCIATION OF NEW JERSEY.

(Organization Meeting.)

The above named Association organized at the office of Dr. James C. Corlies, No. 240 Market street, Newark, N. J., on Tuesday, February 5, 1884. Fifty (50) postal cards were mailed to veterinarians of the State, notifying them of the intention to organize a State Veterinary Medical Association. Twenty (20) veterinarians responded to the call.

At 2:15 P.M. J. Gerth, Jr., D.V.S., called the meeting to order. Dr. Corlies was elected temporary chairman and the Association organized with the election of the following named officers:

President—J. C. Corlies, D.V.S., of Newark.

Vice-Presidents—C. Laurenz, V.S., of Newark; Wm. B. E. Miller, D.V.S., of Camden; C. K. Dyer, V.S., Mount Holly.

Secretary—J. Gerth, Jr., D.V.S., Newark.

Corresponding Secretary—J. H. Dancer, V.S., Orange.

Treasurer—A. Sherk, V.S., Newark.

Board of Censors—T. B. Rogers, D.V.S., Camden; L. R. Sattler, V.S., Newark; D. J. Dixon, D.V.S., Hoboken; W. H. Arrowsmith, D.V.S., Jersey City; Wm. G. Schmidt, D.V.S., Newark.

Dr. W. H. Arrowsmith moved that this Association be known as the Veterinary Medical Association of New Jersey. This motion was seconded and adopted.

A motion was made by Dr. J. Gerth, Jr., that the President appoint all committees, which motion was amended, that not more than three (3) members be appointed on each committee. Carried with amendment.

Dr. Dixon moved that the President call the next meeting at an early date. Seconded and adopted.

Meeting adjourned.

J. GERTH, JR., D.V.S., Secretary.

FIRST REGULAR MEETING.

The first regular meeting of the above named Association was held at Kleb's Hotel, Broad street, Newark, N. J., April 30, 1884.

The President, Dr. J. C. Corlies, called the meeting to order at 3 P.M. Fourteen (14) members were present.

The minutes of the organization meeting were read and adopted.

Dr. Dixon remarked that before proceeding to any other business it was necessary to first decide upon the adoption of the Constitution and By-laws.

Dr. Miller moved that the report of the Committee on Constitution and By-laws be received, ordered read and adopted by sections. Seconded and carried.

Dr. Corlies, the President, instructed the chairman of said committee to proceed to the reading of the report.

Several sections of the Constitution and By-laws were amended and adopted as corrected.

The Association having adopted the Constitution and By-laws, Dr. Dixon stated that it was now in order to proceed to the election of permanent officers for the ensuing year. A motion to that effect was made, seconded and carried.

Drs. Miller, Dixon and Corlies were nominated for President. Dr. W. B. E. Miller, of Camden, was declared elected.

Drs. C. K. Dyer, of Mount Holly, and D. J. Dixon, of Hoboken, were nominated for Vice-Presidents and elected by acclamation.

Drs. H. W. Rowland, of Jersey City, and J. Gerth, Jr., of Newark, were nominated for Secretary, and J. Gerth, Jr., elected.

Dr. W. P. Humphreys, of Elizabeth, was unanimously elected Treasurer.

Drs. J. C. Corlies, T. B. Rogers, H. W. Rowland, L. R. Sattler and A. S. Leatherman were nominated to constitute the Board of Censors. All were elected by acclamation.

Dr. Corlies before retiring appointed a committee of two to

escort the newly elected President to the chair and thanked the Association for having conferred upon him the honor to preside over the organization of this society, the first of its kind in our State.

Dr. Miller on taking the chair addressed the Association with a few appropriate remarks and thanked the members for the honor of having been elected their first President.

After these few remarks the Association proceeded to business and Dr. Corlies arose to a question of privilege, which was granted. He severely censured the State Board of Health of New Jersey for improperly conducting the stamping out of contagious pleuropneumonia, accused them of employing incompetent persons to act as their agents, and of illegally collecting fees for services rendered by their agents, condemned their method of inoculation, etc. Dr. Corlies then introduced a resolution to that effect, requesting the Association to act upon it, and to endorse or reject it as they saw fit.

After considerable discussion it was moved that a committee of three be appointed by the Chair to carefully consider Dr. Corlies's communication and resolution and report at the next meeting. Seconded and adopted.

The Chair appointed Drs. Dixon, Rogers and Rowland as a committee to consider the above communication and report.

President Doctor Miller appointed Drs. Rogers and Rowland essayists for the next regular meeting.

The next regular meeting will be held at Atlantic City, August 14, 1884.

The meeting adjourned.

J. GERTH, JR., D.V.S., Secretary.

MASSACHUSETTS STATE VETERINARY SOCIETY.

Meeting called to order at 7:45 P.M., with W. Bryden in chair. Eleven members present.

The Executive Committee presented the Constitution and By-laws they had prepared and it was generally accepted.

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regularly graduated veterinary surgeons practicing in New England to join the Massachusetts Veterinary Association. Lost.

Moved and seconded that Dadd's School Diplomas be accepted. Lost.

Charles Byrne, M.R.C.V.S., North Cambridge; W. T. Simmons, M.R.C.V.S., South Boston, and Benjamin D. Pierce, M.R.C.V.S., Springfield, presented their credentials to the Executive Committee and they will be reported upon at the next meeting.

Dr. Billings, essayist for June meeting. Subject: "Homœopathy: a Contribution to the Code Question."

The place of next meeting left to the Executive Committee. Adjourned.

W. BRYDEN, V.S.,
President.

J. F. WINCHESTER, D.V.S.,
Secretary.

SANITARY VETERINARY JURISPRUDENCE.

CAMMAN VS. LANE, *Detroit Meat Inspector.*

A suit which is interesting to farmers and butchers was tried before Justice Patton, of Detroit, on Wednesday, April 23. Mr. Lane seized eight calves at the Central Market, Detroit, belonging to Mr. Camman, the butcher. There is a city ordinance which declares that no calves shall be sold as food which are under four weeks old, and Mr. Lane seized the calves under authority conferred by this ordinance. Before the calves were removed, however, Captain Owen, Messrs. Barlum, Petz, Duff, Loosemore, McCune, Reeford, and a number of other respectable butchers looked at the calves and were unanimously of opinion that they had been wrongfully seized, and that in doing so Mr. Lane had exceeded his authority. A suit was accordingly brought by Mr. Camman against Mr. Lane for the calves, which were estimated as being worth \$8.50 each, the entire sum claimed from Mr. Lane being \$68. The butchers above mentioned and a number of others who are among the most experienced of the trade in the city gave it as their opinion that they were good calves; that they would make good veal, and that they thought they were over four

weeks old. It was also proved that Mr. Camman asked that Dr. Murray, veterinary surgeon, should be allowed to examine the calves, but Mr. Camman's request was refused. It was also proved that Mr. Lane sold the eight calf-skins to Mr. Ladue and received from that gentleman the usual market price for calf-skins. Mr. Ladue, who is a dealer in skins, stated that calf-skins range from eight to fourteen pounds in weight; that the eight calf-skins weighed 100 pounds, and that he buys skins at 11, 10, 9 and 8 lbs., so that, judging from Mr. Ladue's evidence, the skins of the eight condemned calves were above the average, which would be 11 lbs., they averaging 12 lbs. and 4 oz. It was also proved that the eight carcasses of the calves were sent to the Zoological Gardens. Dr. Murray, veterinary surgeon, was the last witness called. He stated that he had been appointed for two terms as State Commissioner to prevent the spread of contagious diseases among cattle and the sale of diseased meat; that he had also acted as U. S. Veterinary Inspector for the United States Government in both Michigan and Ohio; that while holding these offices he had been called on to make investigations in regard to disease, and that he had also made investigations as to the soundness and unsoundness of meat. He had heard the evidence as to the condition of the calves, and judging from what he had heard he thought the calves should not have been condemned. No witnesses were called for the defense, and Justice Patton on the conclusion of the evidence gave judgment against Mr. Lane for \$68 with expenses. The prosecution was conducted by Messrs. Penniman and J. G. Hawley, and Mr. Lane was defended by Messrs. W. A. Moore and Conely. The case excited great interest, the court being crowded during the trial, and the judgment of Justice Patton gave general satisfaction.

CORRESPONDENCE.

To the Editor of the American Veterinary Review :

A few weeks ago a Mr. Smith, representing *The United States Veterinary Journal*, published at Chicago, Illinois, called on the graduates of this city for the purpose, as he said, of initiating a

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movement to form a State Association for Missouri, and thus furthering the interests of the profession. The call for a convention which he showed us was signed by half a dozen notorious quacks, not one graduate's name being on the list. He asked for our signatures individually, but each one wishing to consult with the others, requested him to call again, though on account of its commercial savor and the questionable signatures, we felt inclined to fight shy of the whole affair. This gentleman was finally referred to me by two or three of my colleagues, they agreeing to stand by my decision. The other graduates held their signatures in reserve, presumably to see how we acted. I told Mr. Smith that on no consideration would we recognize the quacks; that the way to elevate the profession in public estimation was not to call a convention of the graduates of the stable-fork and broom, and trumpet forth such a proceeding as in the interest of veterinary science. No compromise could be effected, not even to the extent of admitting those men who had practiced ten years or more. The line must be drawn somewhere, and we would have nothing to do with any association which was not *exclusively* of graduates of recognized colleges. At any rate, we did not consider that the time was yet ripe for the formation of a State Association. Nearly all the graduates in Missouri had very recently settled down, and could ill afford to leave their new-born practice at the present time. I pointed out the danger of calling an indiscriminate convention of practitioners; how the quacks could outvote us ten to one, and have everything their own way. To this Mr. Smith replied that their great idea was to advance our interests, and as a secondary matter secure the position of *The United States Veterinary Journal* as the official organ of the Association. That other State Associations were so largely tainted with the empirical element (a fact which I forgot to state I asked him about in our conversation), was their own fault; the *Journal* only asked those who were reputed to be graduates to sign these convention calls, and it remained with ourselves to examine the credentials of such as presented themselves for admission. He was sorry to find that we were not in favor of the convention, and hoped there would be a more favorable outlook

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in the future. Mr. Daniels would have made arrangements with railways and hotels for reduced rates to those who desired to attend. If the graduates would not take the matter up, of course the whole thing would have to fall through. Before he left I told Mr. Smith that the profession in St. Louis would be found ready at any time to advance the cause of science, but we could not possibly consent to recognize these proposed constituents of the Association as our equals, and advised him in future to get a list of graduates of what recognized colleges there are or have been in existence, and exercise a little more circumspection as to the qualifications of those who have been signing these calls for conventions in the various States. We flatter ourselves that Mr. S. found that the graduates of St. Louis entertained a higher idea of both professional duty and dignity than was shown by some of the regulars in other cities.

I have been impelled to lay the preceding before the profession in view of the extraordinary course which this *Journal*, so professedly conservative of our interests, is taking in this matter. To our great surprise and indignation, in a recent issue of the *Journal* appeared the original call for the convention, signed by the following names: Delkas Hass, northeast corner 3d and Chouteau ave.; Edward Scheele, 614 Lafayette ave.; Henry Scheele, Sr., 614 Lafayette ave.; Louis Scheele, 1204 Russell ave.; Ph. H. Hesse, V.S., 709 Russell ave.; Dr. J. T. Wheeler; John J. Kelley, 2613 Washington st.; S. Farrell, 2613 Walnut st.; Frank N. Earl, 2926 Chouteau ave.; all in this city, remember! Not one of these signatures, to the best of our knowledge and belief, is that of a professional man; all, as far as we can ascertain, are quacks of the first water. There is not the slightest shadow of an excuse for such a direct insult to us. I gave Mr. Smith the names of those graduates practicing here, and informed him of the standing of those men whose signatures he had already obtained. The convention is called for May 6th, and a pretty affair it will doubtless be. Meanwhile, we are trying to get the papers to take up our side, and are informing our clients and the general public about the circumstances of the case, so that they may judge of the proceedings in the manner they deserve, and

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place no reliance upon anything said or done at a convention which represents quackery and not the profession.

We emphatically protest against being placed in this anomalous position by the so-called *United States Veterinary Journal*. We declare the convention to be held in St. Louis, Mo., May 6th, 1884, under the auspices of said *Journal*, to be a *direct insult* to the profession at large, and the practitioners of St. Louis in particular; we refuse to believe that the proper way to advance the interests of the veterinary profession is to form a coalition with quackery; we absolutely deny the right of *The United States Veterinary Journal* to put aside the objections of graduates, and advance its private interests at the expense of our young and noble profession. We ask the professional papers to ventilate the matter thoroughly; and, finally, we pledge ourselves to unflinchingly withstand any infringement of our rights, as is proposed by the commercial clique in question. We are few in number, our opponents are many; let all thinking members of the profession give us their moral support. *Vis unita fortior.*

H. H. JAMES, V.S.

OBITUARY.

PROF. DR. LUDWIG FRANCK, Director of the Veterinary School of Munich and Honorary Associate of the R. C. V. S., died lately at the age of fifty years. He was one of the foremost veterinarians of Germany. His works on veterinary anatomy and veterinary obstetrics are the most important among many with which he enriched the literature of his profession, which is largely indebted to the labors of his pen.

EDWIN M. FITZGERALD, D.V.S., died in Greenpoint, L. I., on the 20th of April, 1884. His death was the result of accident or culpable negligence, he having been run over by a train of the Long Island R. R. He graduated in 1882, at the Columbia Veterinary College, and was afterwards appointed assistant to the Chair of Theory and Practice. He worked hard for his profession and did full justice to his calling, and was much esteemed as a teacher and as a practitioner.

NOTICES.

VETERINARIANS WANTED.

Mr. R. F. Myers, of Altoona, Pa., writes asking for a young graduate to start practice in that town. He says the place has 5,000 inhabitants, and no veterinarian within one hundred miles.

Mr. Fred D. Nowell, of North Platte, Neb., writes to the *Breeders' Gazette* on the same subject. His letter, being kindly referred to us by Dr. N. Paaren, says, "There are a great many horses in this and adjoining counties, among which are some of a good class, and there seems to be an effort to improve in breed, size, etc. There is a good opening for a veterinary surgeon. . . . I will undertake to introduce him to all the stockmen."

MEWS AND SUNDRIES.

CAFFEINE is highly spoken of as a substitute for digitalis.

GLANDERS.—New cases of glanders in Illinois continue to be reported by the State Veterinarian.

PLEURO-PNEUMONIA.—Reports of the recent outbreaks of contagious pleuro-pneumonia in Staten Island and Pennsylvania show some decided measures should be adopted for the eradication of this disease.

SHORT PERIOD OF GESTATION.—My Jersey cow, Lady Wellington, five years old, dropped her calf August 3, 1883. She was served again August 12, and on May 2, 1884, dropped a fully developed bull calf. The cow and calf are all right. That makes two calves in one day short of nine months.—E. S. H., Towanda, Pa.—*Country Gentleman*.

SIMPLE HEALING REMEDY.—Human skin and that of young rabbits have been successfully applied in small pieces to large healing surfaces in wounds. Dr. Wilson, however, in the *Medical News*, claims to have obtained very much better results from the use of the internal membrane of hen's eggs. The egg should be fresh and warm.

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YELLOW FEVER AND PREVENTATIVE INOCULATION.—The *Gazette Hebdomadaire de Medecine et de Chirurgie* quotes a Rio de Janeiro paper to the effect that Dr. Domingo Freire's supposed discovery of the contagium vivum of yellow fever, and of the practicability of preventing the disease by inoculation, are attested thus far by 211 successful inoculations.—*N. Y. Medical Journal*.

TUBERCULOSIS IN HENS.—*The Journal of Comparative Medicine and Surgery* says: Professor John, of Dresden, (*Deutsche Land-Press*), reports quite a number of cases of tuberculosis in hens, which were traced to their being fed by a person having the disease, and who had the habit of giving the hens meat which she had chewed up for the juices. She was very fond of the hens, and in summer weather they would congregate about her, and frequently would pick up the sputa which she had coughed up. The liver, kidneys and intestines were mostly affected.

DESTRUCTIVE BUFFALO GNATS.—A well-known traveler for one of the largest grocery houses in Memphis, who recently returned from Mississippi, reports fully 1,500 mules in Yalobusha and Grenada counties, Mississippi, as having fallen victims to buffalo gnats within the last week. Their depredations this year exceed all previous records, and there is no hope of the pests disappearing until warm weather. Over 600 mules have been killed by them within a radius of ten miles from Grenada, Miss.—*Dunton's Spirit of the Turf*.

SHOCK AS A THERAPEUTIC AGENT.—Dr. James P. Tuttle, of New York City, writes: "Your short notes on 'Shock as a Therapeutic Agent' recalls to me a practice among rude, country veterinary men, which I was able to see applied some years ago. It is the shock treatment for lock-jaw in horses, and is applied as follows: A board, one inch thick and about six inches wide, is laid across the forehead, and struck forcibly with an ax or hammer, staggering, or even felling the animal to the earth, when relaxation of the spasms is said to occur. Those who practice it aver it never fails. Certainly the case I saw was good evidence of the truth of this assertion, for the spasms at once relaxed, and a tobacco poultice being applied, they did not return."—*Medical Record*.

EXCHANGES, ETC., RECEIVED.

FOREIGN.—Veterinarian, Veterinary Journal, Quarterly Journal of Veterinary Science in India, Journal of Zootechnie, Presse Veterinaire, Recueil de Medecine Veterinaire, Archives Veterinaire, Gazette Medicale, Bulletin de l'Academie de Medicine, Clinica Veterinaria, Giornale di Anatomie, Fisical and Pathological degli Animali, Revue fur Thierheilkunde und Thierzucht, Revue Scientifique, Repertorium der Thierheilkunde, Tidsskrift fur Veterinarer, Schweizer-Archiv fur Thierheilkunde, Annals de Bruxelles.

HOME.—Journal of Comparative Medicine, Medical Record, New York Medical Journal, American Agriculturist, Country Gentlemen, Prairie Farmer, National Live Stock Journal, American Cultivator, Scientific American, Turf, Field and Farm, Spirit of the Times, Breeders' Gazette, Maine Farmer, Druggists' Circular.

JOURNALS.—Hearth and Home, Rural (Canada), Ohio Farmer, Medical Herald, National Tribune, Missouri Republican, Western Medical Reporter, Home and Farm, Polyclinic, &c., &c.

BOOKS AND PAMPHLETS.—Diseases of the Ear, by Dr. O. Pomeroy; Nature Viranti de la Contagion, by H. Bouley; 12th Annual Report of the Zoological Society of Philadelphia.

CORRESPONDENCE.—J. A. Myers, D.V.S., J. E. Ryder, D.V.S., J. Gerth, Jr., D.V.S., Dr. Winchester, H. H. James, V.S., W. Pendry, D.V.S., C. B. Michener, D.V.S., A. J. Murray, V.S.